outwardly from said liner and being adapted to be snap-fit received in said notches upon installation of said liner into said shell so as to substantially inhibit micromotion between said liner and said shell.

13. The prosthesis of claim 10 wherein the tops of said tabs are rounded so that said lips engage said rounded tops of said tabs as the tabs are received within said notches.

### Remarks

It is noted that the Examiner found that Claim 10, as set forth in Amendment A, contains allowable subject matter and would be allowable if re-written in independent form including all of the limitations of the base claim and any intervening claims. With the exceptions, as noted below, claim 10 has been so re-written and is believed to be in proper form for allowance.

In addition, claim 12, another independent claim has been amended to include subject matter similar to claim 10 and is thus also believed to be allowable.

Claim 10, as presented in Amendment A, specified that the peripheral notches had lips which grasped the rounded tops of the tabs. Claim 10 has been herewith amended to be in independent form, but the requirement that the tops of the tabs be rounded has been omitted inasmuch as this was not believed to be necessary to constitute allowable subject matter. Applicant has added new claim 13, which depends from claim 10, to include the requirement that the tops of the tabs are rounded and thus new claim 13 is believed to be properly allowable.

Claim 12 has been amended to specify a flexible seal and a lock separate from the seal with the lock comprising a plurality of notches in the upper periphery of the shell and a plurality of tabs, one for each notch, extending outwardly from the liner to be snap-fit received in the notches. This is believed to incorporate subject matter similar to the allowable subject matter of claim 10. Thus, it is believed that claim 12, as amended, is in proper form for allowance.

Applicant will herewith respond to the Examiner's action of November 6, 2001 in the order of the Examiner's remarks.

## Response to Amendment

This Amendment B is now in the claim format specified by 37 CFR § 1.173(b)(2).

Supplemental Information Disclosure Statement

Applicant is submitting a Supplemental Information Disclosure Statement herewith including the foreign patent documents and other publications cited on the issued '260 patent.

## Claim Rejections

It is respectfully submitted that because claims 1-5 and 7-9 have been canceled, because claim 10 has been amended to be in independent form, and because claim 12 has been amended to substantially include the allowable subject matter of claim 10, claims 10 and 12 along with new claim 13 are now in proper form for allowance thus obviating the rejections of claims 1-5 and 7-12.

#### Claim 11

Claim 11 has been amended to depend only from claim 10 and to specify that with the tabs disposed in the notches, micromotion of said liner within the shell is reduced.

Antecedent basis for these amends may be found at Column 6, lines 28 – 31 which states "Meanwhile, the tabs of the liner have an interference fit into the notches, with the lips of each notch firmly grasping its respective tab (alternative embodiment), thereby substantially inhibiting micromotion between the liner and the shell."

Thus, it is submitted that claim 11 is properly allowable.

#### New Claim 13

New claim 13 has been added. This claim depends from claim 10 and further specifies that the tabs are rounded so as to be grasped by the lip as the tabs are received in the notches. It is believed that claim 13 is thus allowable along with claim 10.

The amendments made herein are in the nature of clarifying amendments and further emphasize and contrast the novel structure of applicants' invention relative to the prior art. The entry of these amendments requires no new search, raises no new issue, and requires no substantial amount of additional work by the U.S. Patent and Trademark Office. The entry of these amendments is necessary and proper inasmuch as they are believed to place the application in form for allowance, as indicated by the Examiner. These amendments could not have been made earlier because they are responsive to Examiner's comments, as listed in the November 6, 2001 Examiner's action, that claim 10 contained allowable subject matter.

In view of the foregoing, withdrawal of the final rejection, entry of these amendments, and a formal notice of allowance of claims 10 – 13 are requested. If for any reason the application is not held to be allowable, entry of these amendments for the purpose of appeal is hereby requested.

Respectfully submitted,

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**SERIAL NO.:** 

09/595.352

FILED:

June 15, 2000

**EXAMINER:** 

Bruce E. Snow

**DOCKET NO.:** 

**WBC 7403US** 

**GROUP ART UNIT: 3738** 

FOR: Acetabular Component With Improved Liner Seal and Lock



# **APPENDIX AMENDMENT VERSIONS WITH MARKINGS** TO SHOW CHANGES MADE

(Twice Amended) A [The] prosthesis [of claim 9] comprising:

a shell having at least one screw hole formed therein and a smooth inner sealing surface;

a liner configured to seat within said smooth inner surface of said shell, said liner including at least one circumferential peripheral annular seal sealingly engaging said smooth inner sealing surface of said shell to restrict migration of debris toward said at least one screw hole;

said shell having a plurality of peripheral notches therein; and

[wherein] said liner having a plurality of tabs extending outwardly from the liner with each tab being received in a respective one of said notches in said shell, each said notch [includes] having a pair of inwardly projecting lips to grasp its respective said tab. la plurality of generally rounded peripheral tabs on the peripheral edge of said liner as they engage.]

- 11. (Amended) The prosthesis of claim [9 or] 10 wherein with [said liner includes a plurality of generally rounded peripheral tabs on the peripheral edge of said liner,] said tabs so disposed [to engage said plurality of] said notches, [on said shell so as to prevent rotational movement] micromotion of said liner within said [acetabular] shell is inhibited.
- (Amended) A component for an orthopedic joint replacement system, 12. said component comprising a metal shell adapted to be affixed to a bony structure within the human body by means of bone screws or the like, [said shell replacing at least a part of a joint,] said shell having one or more holes therein for reception of said bone screws and [, said shell having] an inner surface, a liner of a suitable synthetic resin material adapted to fit closely within said inner surface[, a liner of a suitable synthetic resin material adapted to fit closely within said inner surface] of said shell, said liner constituting a bearing surface for another component of said joint replacement system, said liner having at least one seal extending outwardly from liner for sealing engagement with said inner surface of said shell around the entire liner so as to prevent the migration of [the] joint fluid and debris from said joint to said screw holes[.], said seal being configured so as to be flexible upon insertion of said liner into said shell after said shell has been affixed to said bony structure by said bone screws, said liner further having a lock separate from said seal, said lock comprising a plurality of notches in the upper peripheral edge of said shell and a plurality of tabs, one for each said notch, extending outwardly from said liner and being adapted to be snap-fit received in said notches upon installation of said liner into said shell so as to substantially inhibit micromotion between said liner and said shell.

Please add the following new claims:

13. The prosthesis of claim 10 wherein the tops of said tabs are rounded so that said lips engage said rounded tops of said tabs as the tabs are received within said notches.